

# The Weather Whisper

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## Day in the Life: The Night Shift

Brooke Hagenhoff, Meteorologist

The night shift, most often called “mids” by our staff. The staggered timing for this shift is either 11p-7a or 12a-8a, with duty distribution very similar to the day with a split between the “forecast shift” focusing on the details of the forecast and the “messaging shift” focusing on data quality control and messaging.

### **Early Morning (immediately after midnight)**

After receiving a briefing from the departing shift, both meteorologists jump right into the swing of duties. The “messaging shift” begins by compiling the climate statistics from the previous day and summaries out for the main climate sites in our area. At the same time, the forecast shift is working through the latest model data and creating an updated 7-day forecast.

### **Mid-Morning (after 3 or 4 am)**

The forecast is published and focus shifts to near-term adjustments as needed and the scheduled aviation forecast updates. These occur on a fixed schedule every 6 hours. Meanwhile, the messaging shift will coordinate the main message to be communicated. If an impactful system is in the forecast, the messaging shift might send email briefings or schedule a webinar, plus answer public questions and conduct media interviews. When event support has been requested, these briefings are sent in the morning so that officials have the briefing in their inbox as soon as they start their day.

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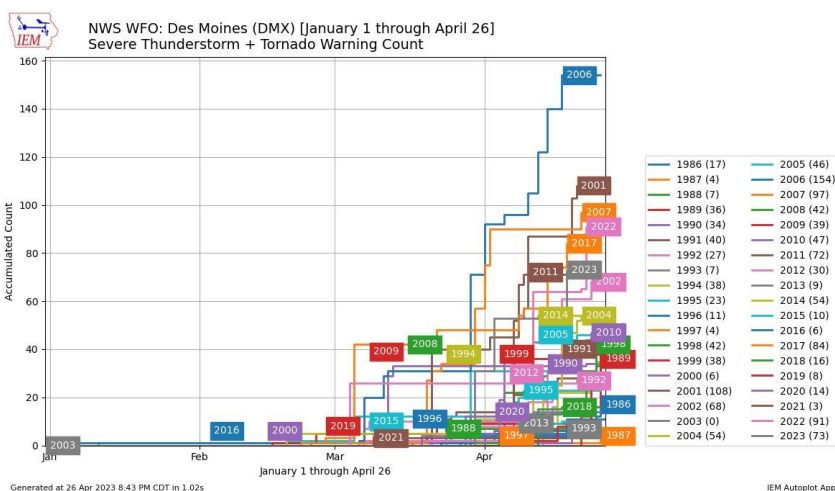
What if there is active weather going on **during** the shift?

Overnight weather can be complicated for staff because most of us are, well, asleep. We plan for this in advance if weather is expected to be active, either asking the evening shift to stay late or asking the day shift to come in early. Sometimes storms will become stronger than anticipated and extra help is needed that hasn't been scheduled in advance. In those rare cases calls are made to get staff into the office as soon as possible, even if it is the middle of the night.

## April Weather Rollercoaster

Kristy Carter and Brooke Hagenhoff, Meteorologists

It has been a busy month at NWS Des Moines with severe weather events on [March 31](#), [April 4](#), and April 19. We've already issued a combined total of 73 tornado + severe thunderstorm warnings in 2023, many of them just in April! As seen in the first graphic to the right, this is a bit above average (dating back to 1986), but not quite the record combined 154 warnings issued between January and April of 2006.



April is often seen as a roller coaster month as we transition from the cool season to the warm season. While we like to think of the transitional season of fall and spring as times with “in between” temperatures that are not too hot and not too cold, often the day to day reality is much more extreme. This year, April was marked by sharp temperature swings, as shown in the daily difference from “normal” graphic on the next page. The week of April 9th, Iowa saw temperatures climb well above average for this time of year, reaching the upper 70s to 80s four days straight. This was followed up with strong storms on April 19th along a cold front, which then sent temperatures back to below average. In fact, on April 21 a number of locations reported snow and graupel!

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[DSM] Des Moines Daily Average Temperature Departure  
1 Apr 2023 thru 30 Apr 2023

April 2023

SUN	MON	TUE	WED	THU	FRI	SAT
						1 -4
2 8	3 3	4 13	5 -10	6 -8	7 4	8 7
9 9	10 9	11 14	12 22	13 19	14 17	15 -2
16 -15	17 -4	18 -1	19 12	20 -1	21 -11	22 -16
23 -14	24 -5	25 -4	26 -4	27 2	28 4	29 -7
30 -8						

Generated at 1 May 2023 4:46 PM CDT in 0.90s

IEM Autoplot App #82

But what exactly is “normal” in the temperature world? In a month characterized by sharp swings in temperatures, averaging all the cold and warm years together over the entire climate record for a specific day certainly

doesn’t tell the whole story for what is “normal”. In fact, despite the temperature swings Iowa has seen this year, by April 30th our average temperature for the month of April (including the high and low for each day) was 52.4 compared to a “normal” of 51.3. Perhaps this April was closer to normal than we thought!



## STAFF SPOTLIGHT

Mike Fowle

*Research to Operations, Scientific Development, Staff Training*

### Background

Mike has been the Science and Operations Officer (SOO) at NWS Des Moines since 2015. Mike is originally from Milwaukee, WI, and is a bonafide “cheesehead.” He received a B.S. in meteorology from Saint Louis University, and a M.S. from the University of Wisconsin-Milwaukee. Prior to his NWS career worked at Iowa DNR Air Quality Bureau in Des Moines, Iowa. His NWS career began at NWS Phoenix in 2003 and he has also worked at NWS Milwaukee, WI and NWS Aberdeen, SD.

Mike’s role as the SOO is focused on two primary functions, staff training and research to operations. Researching new and innovative ways to forecast the weather is an exciting endeavor! Mike’s research interests are varied and have included projects on high resolution model guidance, wind-driven hail events, and a study on the record Vivian, SD hailstone. In his spare time, he enjoys traveling, hunting, fishing, boating, and watching college and professional sports.



Science and  
Operations Officer



20 years of service

On the Cover:

A brief tornado touched down northwest of Deloit, IA on the evening of April 19, 2023. This storm also produced baseball-sized hail near Schleswig, IA. Photo courtesy of Casey Shanaberger.



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